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ABSTRACT

Unlike classical experimental evaluation techniques, this evaluation design is intended to accommodate maximum flexibility and a dual purpose: to learn from the program under scrutiny and to help the program in its efforts. The program being evaluated here is the PUSH for Excellence (PUSH-EXCEL) Program whose activities focus on promoting an environment within which better education can take place. Section 1 of the document describes the logic that links PUSH-EXCEL's activities with its goals. This logic is used as a basis for the evaluation design. Section 2 provides an overview of the approach to the evaluation. Section 3 discusses the choice of measurement techniques, and section 4 outlines the segments of the evaluation to be undertaken in 1979-1980. (Author/JM)

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National Evaluation of the PUSH for Excellence Project: Phase I

Evaluation Design

Prepared for the National Institute of Education, DHEW, Washington, DC.
under contract No. 400-79-0014.

July 1979

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NOTE ON AUTHORSHIP

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INTRODUCTION

Readers of this document are generally familiar with the purposes and the nature of the PUSH-EXCEL[1] program. For those who wish a detailed description of the program as of June 1979, a separate document is available.[2] Briefly, PUSH-EXCEL is a program intended to stimulate major improvements in schools. The national PUSH-EXCEL organization, headed by the Rev. Jesse Jackson, provides impetus and central support, while a local organization in each site provides day-to-day conduct of the local programs. The actual activities are extremely diverse, both across sites and across components within sites. These activities focus *not* on techniques of education, but on promoting an environment within which better education can take place.

The evaluation is being conducted by the American Institutes for Research (AIR) under contract with the National Institute of Education (NIE). The evaluation began in February 1979. The succeeding four months have been spent

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[1] The name EXCEL is already taken by another program; hence the necessity for the hyphenated label.

[2] L. Kumi, N. Thompkins, W. Hamm, and T. Allen. *National Evaluation of the PUSH for Excellence Project: Phase I - Program Descriptions.* Washington: AIR, 1979.

learning about the program. Site visits have been made to Chicago, Los Angeles, Kansas City, and Denver. Extensive discussions have been held with PUSH-EXCEL staff at the national and local levels, with school administrators, and with other interested parties from business, government, and neighborhood organizations. The documentation of the program has been examined.

The purpose of the extensive preliminary work has been to develop an approach to the evaluation that is desirable, useful, and fair. This document describes the result. It is unlike an ordinary "evaluation design," as PUSH-EXCEL is unlike an ordinary education program. To evaluate PUSH-EXCEL along classical experimental lines is both impossible and undesirable, and even the usual approaches to "process" evaluation take on new wrinkles. Added to that is a degree of uncertainty about exactly what the program will look like this fall.

The evaluation design is, therefore, designed to accommodate maximum flexibility while we approach what we see as the evaluation's dual purpose: to learn from the PUSH-EXCEL experience about how to deal with some extraordinarily severe problems in our nation's schools, and to be of use to PUSH-EXCEL in its efforts to deal with those problems.

Section I ("The Rationale for PUSH-EXCEL") describes the logic that links PUSH-EXCEL's activities with its goals. We shall to use this logic as the basis for the design. Section II ("Approach to the Evaluation") provides an overview of what we propose to do and why. Section III ("Operationalizing the Measures") discusses the choices of indicators. Section IV ("Implementing the Approach") outlines the segments we shall be undertaking in 1979-80.

I. The Rationale for PUSH-EXCEL

In this section, we describe PUSH-EXCEL from the evaluator's point of view: the program's goals, its resources, and the logic that links them. Together, they form the "program rationale" that will guide the choice of measures we use.

THE GOALS OF THE PROGRAM

The definition of PUSH-EXCEL is "a total involvement approach toward revitalizing education and restoring discipline to our nation's public schools."[1] "Total involvement" means participation by all segments of the community: individual parents, local organizations and businesses, the teachers and administrators of the schools, and the students themselves. In the long-run, the program wants to raise the achievement level of students--to stimulate excellence, as the name of the program says.

The program seldom tries to increase achievement levels directly (e.g., through tutoring or developing new curricula). Instead, it concentrates on the preconditions and

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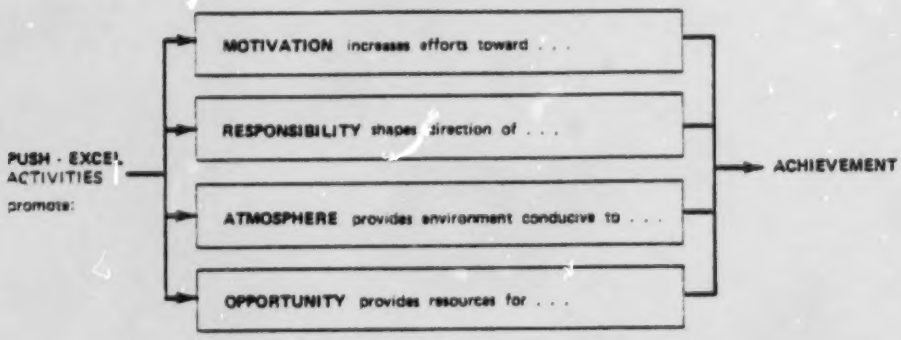
[1] PUSH-EXCEL. *EXCEL: The Developing Process of Implementation.* Chicago: 1979, p. 5. This is the most recent and most authoritative of the many descriptions of the program's underlying principles and objectives.

facilitators of effective education. PUSH-EXCEL has specified four of them as goals: *motivation, responsibility, atmosphere, and opportunity.*[1] Each activity that PUSH-EXCEL undertakes is supposed to be directed at one or more of these outcomes, and together they are to produce changes in achievement:


PUSH - EXCEL ACTIVITIES promote:
MOTIVATION increases efforts toward . . .
RESPONSIBILITY shapes direction of . . .
ATMOSPHERE provides environment conducive to . . .
OPPORTUNITY provides resources for . . .
ACHIEVEMENT

The operational descriptions (ours, not PUSH-EXCEL's) for these four labels are:

Motivation is treated as the state of mind that activates behavior, given opportunity. In particular, positive motivation is "the disposition to strive for success in competition with some standard of excellence."[2] Its centrality to the premises behind PUSH-EXCEL is self-evident.

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[1] *Ibid.*

[2] Patricia Gurin and Edgar G. Epps. *Black Consciousness, Identity, and Achievement.* New York: John Wiley & Sons, 1975, p. 83. This definition follows the "need for achievement" (NAch) construct developed by David C. McClelland (e.g., *The Achieving Society.* Princeton: Van Nostrand, 1961).

Responsibility is equally important in the PUSH-EXCEL approach. It shapes the motivation, points it toward legitimate and moral ends. It rests on a sense of *personal accountability* that spans many sectors--being a responsible citizen, responsible sexually, responsible as a parent, and responsible in the broadest sense of personal integrity.

Atmosphere refers to the school, home, and community environments within which achievement is to take place. In the school, it embraces negative factors (drug use, violence, disrupted classrooms) that PUSH-EXCEL seeks to diminish and positive factors (admiration for academic achievement, teacher enthusiasm) that PUSH-EXCEL wants to promote. In the home, atmosphere includes specifics such as parental enforcement of study hours and, more generally, parental support of education. In the community (which, to date, has received less direct attention from PUSH-EXCEL than the school and the home), atmosphere refers to the many ways in which the local environment can support students (e.g., through active community youth programs) or undermine them (e.g., open sale of drugs on the streets).

Opportunity, as we shall use the word, refers to resource base. Within the school, opportunity is measured by facilities, equipment, and teaching resources (e.g., number of teachers, special training). Outside the school, opportunity is measured by indicators such as job openings, availability of postsecondary training, and basics such as adequate food, clothing, and shelter.

Given this set of goals, the questions are how the program proposes to achieve them, and how the evaluators propose to tell if the program is succeeding in doing so. The two issues are quite distinct, and we take up each separately.

THE ROUTE TO PROGRAM GOALS: INVOLVEMENT

The way that PUSH-EXCEL hopes to reach its program goals is arguably as significant as the effects on the students. Rather than independently running a large program of service-delivery activities, PUSH-EXCEL relies on the involvement of others. To set the process in motion, PUSH-EXCEL has two sets of resources: local, city-specific PUSH-EXCEL programs and the national PUSH-EXCEL movement.

Local PUSH-EXCEL Programs

As a program, PUSH-EXCEL has chosen to rely on the community's own resources and not on its own staff--a route that is often proposed but less often followed in social action programs. A local PUSH-EXCEL program consists at the outset of only a structural shell, not a cadre of staff. The most common configuration is a city director, a community liaison person, and a teacher assigned part-time as a school liaison. Everything else is supposed to flow from volunteer, community-based efforts. The main function of the PUSH-EXCEL staff is to stimulate, organize, facilitate, and support the work of others: community organizations, parents, school staff, and the students themselves.

Community involvement might produce impact on any of the four program goals, and is especially appropriate for producing changes in opportunity. The community can, to some extent, provide infusions of people, dollars, and facilities to augment the resources available in the school system. Community involvement is also potentially a solution to the problem of PUSH-EXCEL's "unique resource" in the form of the Rev. Jackson. Each community has figures with local

authority and credibility (e.g., ministers) who could play the Rev. Jackson's role, given the right community organization and platform.

Parental involvement is expected to produce impact directly on atmosphere in the home and in the school. Examples of these effects are the two-hour daily study period that parents are urged to establish, and the increased interaction with teachers and the school (e.g., by exchanging home phone numbers at the beginning of the year). Parental involvement is also expected to produce impact on motivation and responsibility via generally increased parental concern for and direction of their youngsters. (Note the potential importance of the effects from National PUSH-EXCEL: parents who may not credibly be able to say things to their children on their *own* authority may be able to say them by invoking the Rev. Jackson's credibility.)

School involvement is stimulated directly by the PUSH-EXCEL staff, but it is also very much a function of community and parental pushes. One of PUSH-EXCEL's major premises is that schools will get better when parents demand that they get better (and notice when they do). Apart from this, the school can independently make progress on important dimensions of opportunity (e.g., by making special efforts to obtain new resources and facilities) and atmosphere (by the general stance and initiative taken by teachers, for example).

Student involvement is at the heart of the program's aims, and as we observed in the Chicago, Kansas, and Los Angeles projects, such involvement may take many forms. In the school these include participation in activities sponsored by PUSH-EXCEL (for example, a clean-up campaign, academic olympics) and utilization of school resources, such as a career counseling service. Student efforts to attend

classes more frequently or serve in a leadership role also fall under the involvement rubric. And out of school, the student can study each evening, perform volunteer work in a community agency, participate in community efforts such as voter registration campaigns, or serve as an intern in a local business.

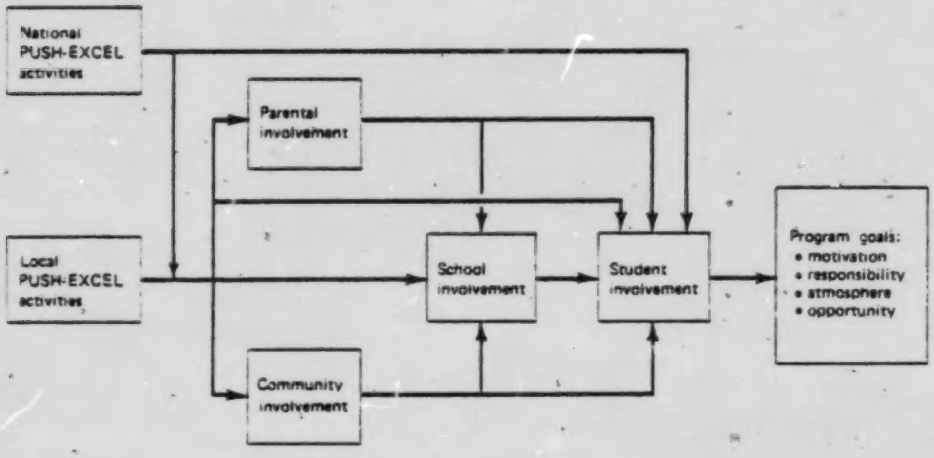
National PUSH-EXCEL

The other resource that PUSH-EXCEL brings to bear is a function of the nationwide scope of the organization, its extensive media coverage, and, uniquely, the personality of the Rev. Jesse Jackson. PUSH-EXCEL cannot be understood as a program only. It is also a movement, based on an inspirational message. That message is delivered by one of the few authentically charismatic speakers on the contemporary scene, and one who has for many blacks a special credibility and moral authority.

Given this, the evaluation must recognize that PUSH-EXCEL has a route to impact that bypasses all of the usual trappings of a social action program: impact can occur simply because someone has listened to the Rev. Jackson's speeches and has been motivated to act. In some cases, the effect of what we shall call "national PUSH-EXCEL" may be to facilitate involvement--the parent independently starts to enforce study hours or (as we know is happening in some sites) community involvement can be stimulated, and local "EXCEL" programs started that have no connection whatsoever with the official PUSH-EXCEL network. In other cases, the effect of national PUSH-EXCEL can be even more direct: the students themselves start to behave differently without any stimulus other than exposure to the Rev. Jackson's message. That the impact of national PUSH-EXCEL occurs without following the bureaucratic book does not make it any less legitimate

than impact that occurs as a result of the sequence of events set in motion by local PUSH-EXCEL staff as part of the implementation process.

To summarize the discussion of the local and national routes to impact, a diagram of the hypothesized causal relationships may be helpful. It looks roughly like this:

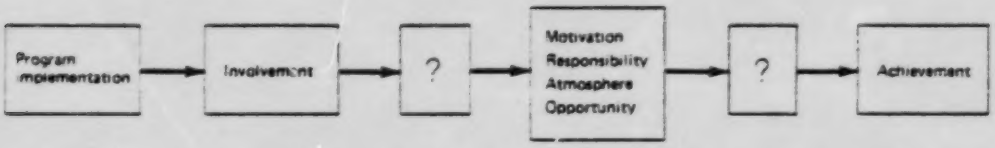


It should be emphasized that achievement of involvement of parents, community, and the schools is an important outcome on its own, independent of its measured impact on the program goals, and will be treated as such in the evaluation.

BETWEEN INVOLVEMENT AND IMPACT: INVESTMENT

What is it that PUSH-EXCEL expects to happen as a result of all this involvement? What are the mechanisms that take the program from involvement to the four program

goals, and from the four program goals to the eventual increases in achievement that should eventually become visible?



Let us focus first on the box between the four program goals and achievement. The question is: once there is a better atmosphere and opportunities have been expanded and students are motivated and carry a sense of responsibility--once all these things have happened, will we then immediately observe better grades and test scores, more college admissions, more scholarship winners? Probably not, especially during the relatively short time that the evaluation will be observing the results. The immediate behavioral consequence of what PUSH-EXCEL is trying to accomplish is not achievement itself, but *trying* to achieve. We will call these efforts to achieve "investments," with an investment behavior defined as *any voluntary expenditure of time, effort, or money to pursue legitimate opportunities, in hopes of a future return.*

The key elements of an investment are its *future orientation*, the choice to work through *legitimate opportunities*, and its *self-perpetuating* nature.

The future orientation is critical because, as the Rev. Jackson stresses, excellence is not an overnight phenomenon. It requires willingness to defer gratification, sometimes for years. Further, one of the major shifts in perception that PUSH-EXCEL wants to bring about is toward

optimism about the future and toward belief that opportunities do exist. On both counts, investment behaviors imply acceptance of major premises of the PUSH-EXCEL message.

The choice of legitimate opportunities is an obvious condition we must tack onto the definition. The schools in which PUSH-EXCEL works have many active investors, entrepreneurs, and upwardly mobile youth--too often, however, in activities that eventually land them in jail. Much of what PUSH-EXCEL must do is not create energy and ambition, but rechannel it.

The self-perpetuating nature of investment behaviors is perhaps most critical. At bottom, PUSH-EXCEL rhetoric is not selling a carrot-and-stick approach to life. The Rev. Jackson's speeches contain strikingly few references to the desirability of the eventual rewards--the big house or the fancy car. Rather, the emphasis is overwhelmingly on the process whereby excellence is achieved--the hours of work behind the moment of success, the morality of the act of learning, the dignity of trying. And in fact, the Rev. Jackson's appeal corresponds very closely to what psychologists know about achievement motivation. People with high need for achievement seldom stop when they get the rewards of achievement; nor is the prospect of more rewards what keeps them going. The need for achievement is not ordinarily produced in the first place by promises of rewards, but rather by the kind of ethical acculturation that the Rev. Jackson employs. It is only a slight exaggeration to say that PUSH-EXCEL is ultimately trying to shape an approach to life in which trying is central and achievement the byproduct.

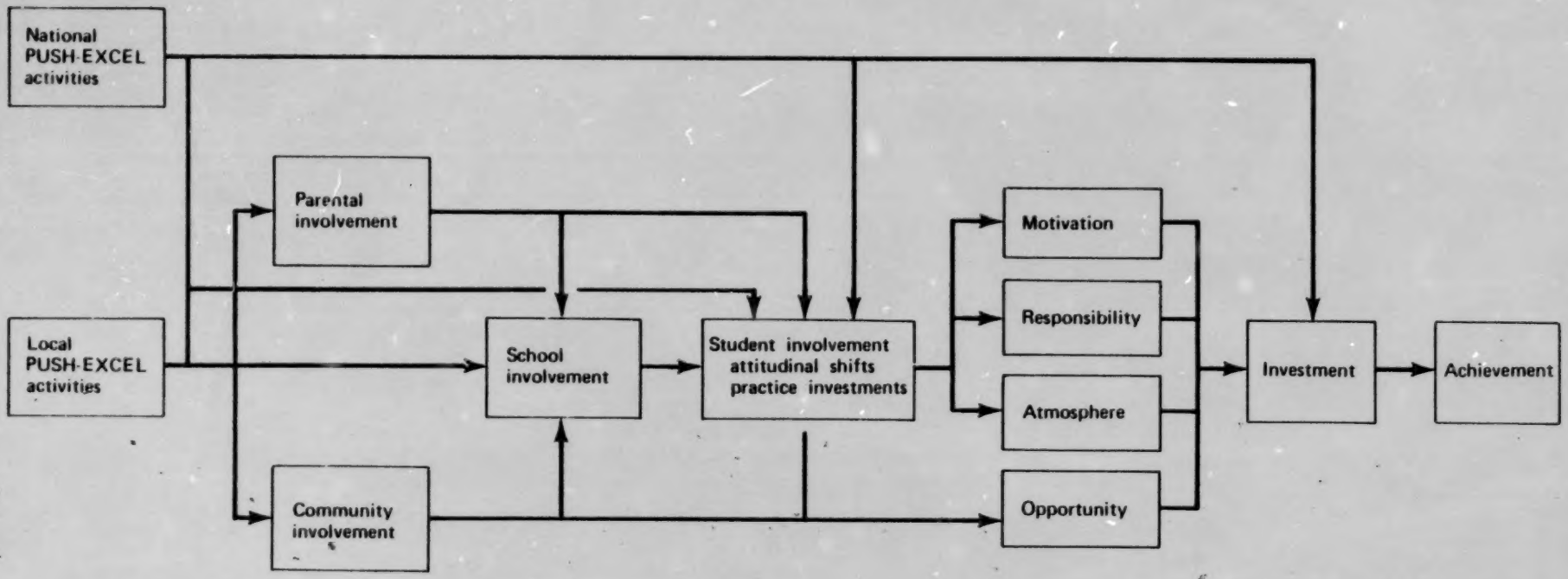
Now, let us turn to the earlier box, the one between the involvement goals and the program goals.

The investment construct again is a useful way to approach an understanding of PUSH-EXCEL in its earliest phases. Much of what PUSH-EXCEL is trying to do initially is to generate "formative investment" whereby students learn, little by little, the process that eventually translates into the habit of investing time and energy for long-term ends.

Formative investments are not spontaneous; they are directly stimulated by activities of PUSH-EXCEL, the school, the community, or other students. They are not solely future-oriented; they are short-term, perhaps with immediate rewards. On both counts, they are less significant than "real" investment as we have defined it. Thus, for example, an increase in the number of students enrolling in a voluntary summer school would be more significant than increased enrollment in the school band. But the band enrollment is, nonetheless, significant. A student who attends band practice regularly, practices at home, and submits to the discipline of working within the group is doing the same kinds of things that will be required of investments without the quick rewards associated with being in the band. And it is this we wish to capture in the "formative investment" construct. We shall not ignore evidence of attitudinal change, but behavioral evidence of increased formative investments will increase our confidence that the students are, in fact, responding to the message that PUSH-EXCEL is communicating.

SUMMARY

Figure 1 on the following page presents what we shall call the basic rationale for PUSH-EXCEL. The logic represented in the diagram may be summarized as follows:



Note: Only the main lines are shown, to aid clarity. Note also that Opportunity is expected to be a predominately independent variable, which PUSH-EXCEL can affect only at the margins and over time.

Figure 1. Basic Rationale for the PUSH-EXCEL Program

PUSH-EXCEL is both a national movement and local programs. The movement aspects of PUSH-EXCEL can strike directly at attitudes and behavior without any intervening steps, and "movement effects" can snowball. The evaluation may miss the forest for the trees if it focuses exclusively on the kind of "program effects" that evaluators are accustomed to seeking.

The program part of PUSH-EXCEL provides only a structural shell. The first questions to ask about the program are whether resources are being mobilized:

> Are parents becoming more involved in monitoring and encouraging the education of their children?
>
> Are community groups and institutions devoting increased attention to the education and support of young people?
>
> Are teachers and administrators in the schools increasing their voluntary, extra-effort activities in support of students?

The next questions to ask involve program goals:

> Are the school and home environments becoming less disruptive, more supportive of learning, and more rewarding of success?
>
> Are the motivations of students being altered in the direction of higher need for achievement?
>
> Are the assumptions of students being altered in the direction of greater personal accountability, both for their current behaviors and the shape of their futures?
>
> Are resources and opportunities for students being widened, either within the schools or in the community at large?

The ultimate progress toward success is reflected through investment:

> To what extent are students volu[illegible]ly investing time, effort, or money to improve their lives?

Associated with each of these evaluation questions is a diagnostic one:

> What in the program or surrounding events produced or failed to produce this result?

Now we turn to a discussion of the strategy that will permit us to respond to the questions.

II. The Approach to the Evaluation

We concluded the first section with several questions for the evaluation of PUSH-EXCEL. The questions are keyed to the logic, or rationale, of the program and address two broad topics: (1) the results achieved at major junctions in the logic, and (2) the programmatic and other events that produced (or impeded) the results.

The approach that we shall use to address these questions is the topic of this section. We present first an outline of the approach with an example. This is followed by a discussion of standard evaluation issues addressed by the approach. We conclude with our views of the approach and its implications for the role of the evaluator.

THE STRATEGY AND AN ILLUSTRATION

The approach may be condensed into a few steps.

The evaluation begins with a basic rationale, as presented in the preceding section. It covers the broad, strategic intentions of the program and sets up the nature of the questions to be asked by the evaluation.

The implementation of that program is much more complex than we can reflect in the basic rationale. Many sequences of events are involved, leading both to the desired outcomes and to others that are not desirable, but plausible. We expand the rationale to incorporate the principal chains of intervening events. The elaborated "map" of the program's logic is used to select specific indicators, and to spell out the strategies that are to take the program from activities to results.

Data are collected on the intervening events specified in the full rationale. This is done incrementally, concurrently with the program's implementation. Similarly, we continue to change and elaborate the rationale as the program itself evolves.

Evaluation results for each sequence of steps are presented in the form of documented rationales that set the stage for deciding on appropriate next steps--both for the program, if the program's administrators wish to use the results in that fashion, and for the evaluation.

The theoretical basis for the approach is discussed in detail in the technical proposal for the evaluation.[1] At this point, a single concrete example may be useful. We have chosen one of the basic PUSH-EXCEL activities, the pledges that students are asked to sign, and take it through the process from beginning to end.

We start with PUSH-EXCEL's plans to conduct the pledge activity in certain sites and the assumption that pledging is part of a crucial sequence linking PUSH-EXCEL efforts (e.g., promotion and presentation of the pledges) to one or more outcomes. Then, using conversations with PUSH-EXCEL

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[1] C. Murray and S. Murray. *Evaluation of Project EXCEL: Technical proposal.* Washington, D. C.: AIR, 1979, pp. 17-24.

staff, the program documentation, and our own ideas, we devise a set of hypotheses about the effects of signing pledges. Such hypotheses might include the following:

Hypothesis 1: Signing the pledge *has a long-term effect on motivation and effort even if nothing else happens.* This is an unlikely hypothesis, but it should be stated explicitly anyway for one reason -- so that PUSH-EXCEL staff can decide for themselves whether they think it is unlikely.

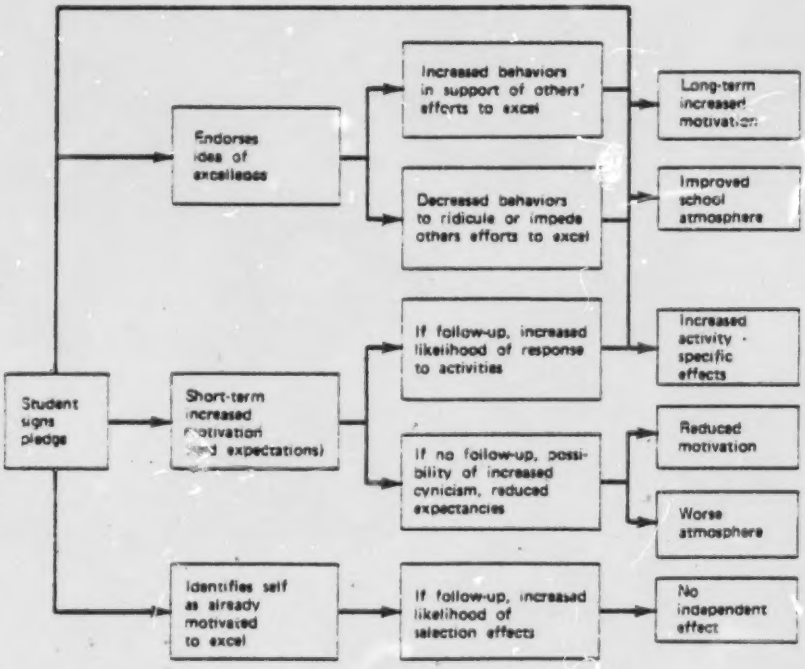
Hypothesis 2: Signing the pledge seldom has a direct effect on positive achievement behavior, *but it does have the effect of getting many students to endorse the idea of achievement*, and thereby dampens the negative peer pressures regarding academic achievement that have characterized many of the PUSH-EXCEL schools. It helps academic achievement become respectable, by the psychological phenomenon of identification.

Hypothesis 3: Signing the pledge *has a short-term effect on motivation and behavior, which makes the student more open to follow-up activities.* Not at all implausible, but easy to confuse with the fourth hypothesis, that...

Hypothesis 4: Signing the pledge *identifies for PUSH-EXCEL those students who are already most motivated to achieve.*

Hypothesis 5: The pledge format *lends itself to easy communication and to publ city*, thereby promoting the effects of national PUSH-EXCEL.

We then interpolate these evaluation implications into the rationale as follows:


Student signs pledge
Endorses idea of excellence
Short-term increased motivation (and expectations)
Identifies self as already motivated to excel
Increased behaviors in support of others' efforts to excel
Decreased behaviors to ridicule or impede others efforts to excel
If follow-up, increased likelihood of response to activities
If no follow-up, possibility of increased cynicism, reduced expectancies
If follow-up, increased likelihood of selection effects
Long-term increased motivation
Improved school atmosphere
Increased activity - specific effects
Reduced motivation
Worse atmosphere
No independent effect

The expanded rationale is used to determine evaluative strategies for each hypothesis and the measurement indicators. The analyses might be presented as follows:

(1) The first hypothesis, if valid, is part of the broader phenomenon of responding directly to the Rev. Jackson's message, and probably cannot be disentangled from that broader phenomenon. It will not be investigated as a discrete, separate line.

(2) The second hypothesis should be investigated. It is plausible that the act of signing the pledge will tend to

drive home the Rev. Jackson's message and make it a little harder to ridicule the student who likes to study and a little easier to applaud at an awards assembly.

(3) The third hypothesis (that the pledge-signing has a short-term effect) could go either way: if follow-up occurs, perhaps the student will be more open to participation; if no follow-up occurs, perhaps a negative effect will set in: the student has been inspired to sign the pledge and to take it seriously--then nothing happens. Both the positive and negative possibilities can be investigated, again using interview data, comparing responses in the sites where follow-up did and did not occur. The results would be of obvious importance to the ongoing operations of PUSH-EXCEL, as well as to the final evaluation analysis.

(4) The fourth hypothesis suggests that a self-selection effect is occurring: the students who sign are the ones who already were susceptible. The evaluation implication is that the pre-EXCEL records of signers and nonsigners should be compared, to guard against spurious interpretations of the effects of the pledge program. The program implication is that PUSH-EXCEL might want to know whether the pledge-signing program is aiding the program's avowed intention of reaching *all* students, or whether it might be driving a rift between students--and, finally, whether this rift is really bad after all. For there is another part of the rationale we have not presented about the student who listens to the speech and then does *not* sign.

After hypotheses appropriate for testing have been selected, we would collect data on adjacent events in the sequence: presentation of the pledges, number of students signing the pledges, short-term effects of pledging, and the

processes linking short-term effects to higher-order achievement outcomes. Rapid analysis of the data follows, and the results, in the form of documented rationales, are presented to program staff. They, in turn, may choose to modify the pledge sequence if necessary or proceed to another sequence in the logic. Stakeholders may also be consulted on their needs for evaluation information. We monitor the program's decisions and plans and then design an evaluation for the next sequence chosen by PUSH-EXCEL.

This example has been presented at length to illustrate key features of the approach:

(1) It focuses on *adjacent events* for obtaining information about causes-and-effects, and for developing useful diagnostic information. Rather than measuring "input" at one end of the process and "impact" at the other, we shall break down the PUSH-EXCEL process into identifiable, discrete components, and specify and evaluate their hypothesized relationship to each other.

(2) The approach assumes *steady feedback of evaluation information to the PUSH-EXCEL staff and other Stakeholders in the project.* In turn, the evaluation team receives information on developments and changes in the project and related user information needs.

(3) The procedure permits us to *build the design incrementally.* The evaluation becomes a series of "go" and "no-go" decisions: We evaluate linkages and invest resources in the next link only if the prior one has, in fact, occurred. To return to our example: the hypothesis that pledging has a short-term effect (hypothesis 3) could easily consume a significant research effort, but we shall start to design

the instruments and choose the samples only after verifying the extent to which (a) PUSH-EXCEL uses the signed pledges for enlisting students in other activities, and (b) significant activities exist at site X that have identifiable "members" in the first place. If neither of those conditions obtains, then the nature of the effort changes drastically. Given our uncertainty about what PUSH-EXCEL will be doing in 1979-80 (let alone subsequent years), this flexibility is essential.

The advantages of using the above approach are threefold. It can capture changes that the program generates; it permits reasonably confident statements about the role of the program in processing them; and it maximizes the diagnostic value of the information we obtain. To see the basis for these advantages, it may be helpful to put the approach we shall employ in the context of the classic analytic questions that evaluations have asked. We do this in the discussion below.

DETERMINING AND ATTRIBUTING CHANGE

The standard questions that may be asked by a program evaluation are these: How much of the change we observe can be attributed to PUSH-EXCEL? How much of the change we observe can be attributed to random fluctuation? Answers require solutions to four large problems.

(1) *Control.* In laboratory experiments, two elements are considered indispensable. The first is *exclusion of extraneous events*, which the evaluator of a social program can never ensure. Events can occur that wipe out the experiment (e.g., a public jobs program that drastically reduces

unemployment). Less spectacular events commonly do occur that can be presumed to have had some (unknown) degree of impact.

The second type of laboratory control is *uniformity of the input*. PUSH-EXCEL systematically denies this as part of the program, in two ways.

One source of variation that will continue indefinitely is that *the PUSH-EXCEL concept depends on local initiative*. The "treatments" that the national PUSH-EXCEL staff promote are to be adapted to the needs identified by the local participants, and delivered by means that are adapted to local conditions. There is no PUSH-EXCEL program even in an ideal sense, but as many programs as there are sites (and, perhaps, components within sites).

A second source of variation is presumably temporary, but is even more of a problem as we undertake the evaluation. Namely, *PUSH-EXCEL is a concept that is developing, and the input combinations are not yet fixed*. At present, PUSH-EXCEL offers suggestions to local programs for a variety of activities and structures. The local programs select inputs from the roster of suggestions, modify them, and often devise other inputs on their own. Sometimes these are consistent with PUSH-EXCEL guidelines and goals; sometimes they are peripheral. As implementation proceeds, participating sites are to offer feedback about which inputs work and which do not. Rationales for the inputs and optimal combinations to address specific needs are to be developed and tested. Concomitantly, as reports come in from the field and as the concept and associated inputs are sharpened, program staff should be ready to modify their expectations for impact.

Evidence of early shifts in focus comes from one recent interaction with program staff, when site directors ranked program goals and intermediate objectives according to long-range priorities, in contrast to priorities for the coming fall semester. The ordering of priorities for the two time frames were markedly different. We cannot predict how the choices for immediate focus will affect subsequent ones, but that experience will result in some modifications is certain.

(2) *Equivalency*. To factor out the effect of extraneous events, the evaluator normally observes the changes that occur over the same period of time at a number of "control" sites at which the program is not implemented. The assumption is that the difference in the amount of improvement that occurs at the pilot and the control sites is attributable to the program, since the sites are equivalent in other relevant respects. But, inasmuch as all of the characteristics of an environment that are "relevant" to the outcome have not been determined, the evaluator cannot document this equivalency. *Given the very complex set of factors associated with the problems PUSH-EXCEL addresses, it is certain that the control sites are not equivalent in some important respects.* And the ordinary countervailing strategy--large sample sizes to wash out the nonequivalencies--is not economically feasible.

Equally important, *any control schools we might select would not stand still.* They too would be trying to cope on their own and would be the recipients of special programs. The notion of using "comparison schools" for the PUSH-EXCEL evaluation is superficially plausible but operationally untenable.

(3) *Time Lapse.* An essential premise in impact calculation is that the impact is occurring (if it ever will) while the evaluator is looking for it. But *the outcomes of PUSH-EXCEL will not occur all at once.* They will occur in sequences that may stretch over several years. For us as evaluators, this poses a dilemma. If we start measuring everything from the start, some effects will not have had adequate time to mature. If a more generous interval is permitted, the number of extraneous events that will intrude is likely to increase. This problem is compounded by the fact that virtually nothing is known about the length of time various types of outcomes require. Scheduling is largely a guess.

(4) *Sample Sizes.* PUSH-EXCEL is intended to serve several populations. With respect to students, this means that any student--from the lowest achiever to the highest--is a potential client. But not all students are clients of all inputs, nor can it be expected that all students will react similarly to any given input. Program activities vary according to the needs of different student subpopulations, and program impact from a single input must be preserved to vary among subpopulations. With respect to nonstudent populations, it must be remembered that PUSH-EXCEL includes program inputs directed toward parents, businesspersons, and community groups. These inputs may vary in intensity and type from population to population; and, again, impact may vary among populations exposed to the same input. If AIR tries to draw statistically meaningful samples from all of the important populations in all sites, we shall have a combined sample in the tens of thousands.

These four considerations all argue for the virtues of an evaluation that assumes a constantly changing program,

and has the flexibility to focus on discrete events and relationships rather than a grand, experimental comparison of "treatment" with "no treatment."

Overriding even these, however, is another lesson from evaluations of major social programs over the past 20 years: no matter how carefully and elegantly one calibrates the relationship between initial programmatic efforts and final impact, the result is virtually bound to be "no effect" or at best "marginal effect." The exceptions can literally be numbered on a few hands. The consequence has been the developing attitude that nothing works, and we believe that attitude to be as much a function of how the evaluators have done their work as it is a function of what the programs have accomplished.

Partly, the miniscule impacts have reflected the long stretch, the many intervening events, between input and impact. At each step, a chunk of "results-to-this-point" fails to survive. This inevitable attrition in effect at each stage is the analytic motivation for measuring adjacent events. But beyond that, evaluators have been of little use in alerting the program implementers to obstacles and revealing to them the pieces that *do* work. And that leads to the final design considerations we wish to emphasize, the evaluator's role in supporting success.

SUPPORTING SUCCESS

In the introduction, we asserted that a major purpose of the evaluation is to be useful to PUSH-EXCEL. The implication is that we as evaluators intend to interact with the

PUSH-EXCEL staff--to put it bluntly, that the evaluation will (we hope) be used to build the PUSH-EXCEL program as well as to test it. Let us elaborate on what this aspect of the evaluation design does and does not mean.

Within the profession, there is as yet no consensus on the ethics of the interaction of evaluator and evaluatee. The classical position is that the evaluator should be the detached observer. Advice from the evaluator during the course of the work will contaminate the research and compromise the evaluator's objectivity. The revisionist position calls for the evaluator to take a much more active role.

The debate between the classical and revisionist positions remains vigorous. We recently attended a meeting of a technical review panel for an analogous evaluation at which the issue of detachment/involvement was debated for the better part of two days. Each of the five review panel members was a person of considerable stature in the evaluation world. And the results at the end were two for detachment, two for involvement, and one who saw merit in both sides.

We will state our own position in two ways. First, philosophically, we favor an evaluation that helps make the program work. If we are confident that something is not going the way the program staff thinks it is, we will provide them with information to that effect, even though the result may well be mid-course changes that contaminate the analysis.

We draw the line at helping to design the program-in-progress. A program that is worth a major evaluation typically stems from a few central concepts. The program tries to operationalize the concepts to make them work on

the street. The long-term scientific and social value of conducting the evaluation, in our view, is to learn something about the validity of those concepts. We will provide information that may be useful to bring practice more closely in accord with the expressed concepts of the project. We would avoid tampering with the nature of the concepts, and would, in fact, tend to discourage contemplated changes.

But, having stated these predispositions, we also should emphasize that we think much of the current theoretical debate about detachment versus involvement is irrelevant. From a practical standpoint, a hands-off, detached clinical stance is usually out of the question, certainly so in the EXCEL evaluation. The evaluators are going to be deeply involved with the program staff, or they will be cut off from the kinds of data and kind of understanding necessary to conduct a valid assessment. If EXCEL's leaders are not happy with the evaluators, we predict that they will not suffer in silence, nor cooperate with people who, in their view, are not going to give the program a fair shot.

We may put this general position in the context of the evaluation approach described in the preceding sections.

We begin by accepting as given the philosophical underpinnings of the PUSH-EXCEL program. We do not intend to test whether motivation and hard work and persistence will generally produce better education and better jobs and better lives. We recognize the controversy that surrounds the program on this score--that PUSH-EXCEL understates the barriers of racism and economics to progress, and raises unrealistic hopes. But from our perspective, it is pointless to attempt to test whether PUSH-EXCEL or its critics are right. *If* PUSH-EXCEL is beautifully implemented *and* expected

outcomes do not appear *and* we are unable to point to straightforward explanations in the immediate circumstances surrounding the program, then we shall fall back on the possibility that the fundamental assumptions behind PUSH-EXCEL are wrong--which is to say that some fundamental assumptions about the work ethic are wrong or outdated. But until we reach that point, we will work with PUSH-EXCEL on the basis that they have a sound idea which will work if it can be operationalized.

Our next task, which has already begun, is to be a devil's advocate (given the basic shared assumption stated above), by playing back to PUSH-EXCEL its own rhetoric in a restructured form. That is the function of the preliminary rationales presented in this document. In effect, we say to the program, "Here is how you say you will get from point A to point Z. Here are the things that have to happen between here and there that you have ignored." Or sometimes the message will be: "Given what you say activities X and Y are supposed to accomplish, here are the ways in which your own logic predicts that they will conflict with each other." If and how PUSH-EXCEL responds is up to them. AIR will not design program activities. As the evaluation proceeds and data on the initial segments become available, the dialog will shift from the gaps and contradictions in the rationale, and toward feedback based on actual results. These should be of value in modifying practice in some instances, and standardizing practice in others. Similarly, the unplanned events that always intrude into implementation of demonstration programs will be regarded not as sources of error, as in the classical evaluation model. We will treat them as needs to be met by PUSH-EXCEL with appropriate, supplemental inputs to keep the process going. Thus the proposed strategy is for PUSH-EXCEL to continue (as it was doing anyway) to implement a set of related activities and for AIR to evaluate

them on an incremental basis. "The PUSH-EXCEL Program" is in one sense not the basis for the evaluation, but a product to which we hope the evaluation will contribute.

III. Operationalizing the Measures

We have outlined an evaluation that is incremental in development (as is PUSH-EXCEL), tracks outcomes in relation to specified causal sequences, and is supportive of the project. At the core of this approach is the program rationale, used as a guide for selecting both the cause-effect sequences to be evaluated and the appropriate measures of outcomes. The details of a sequence in the rationale are presented as testable hypotheses prior to the evaluation of the sequence and, following the evaluative activity, presented as a cause-effect link that was or was not established.

We now return to the basic rationale, outlined in Section I, as a guide to specifying impact measures--indicators of the extent to which the involvement and program goals are or are not occurring. We divide the indicators into three broad classes: indicators of attention, intermediate outcomes, and impact on the students.

INDICATORS OF ATTENTION

As PUSH-EXCEL's own rhetoric points out, the first step in getting results is to get attention. We borrowed this word to describe the first set of behaviors or events to be measured. This consists of those outcomes that are unambiguously attritutable to PUSH-EXCEL efforts and, therefore, most directly within the control of the program.

Attention indicators are always defined by the nature of the specific programmatic activity in question. For example, if PUSH-EXCEL sponsors a training session on how to apply for a job, attention indicators would include

- number of students attending,
- comprehension of the material,
- memory of the material, and
- immediate reaction to the material.

Data on immediate outcomes of both types will typically be collected through on-the-spot observation by AIR personnel. With only a few exceptions, data on comprehension, memory, and affect will be collected by ad hoc, unrepresentative sampling of participants as they leave the activity.

The analytic value of the immediate outcomes lies in providing an early, inexpensive indicator of the value of looking further. If, to continue the training example, it turns out that the materials were not understood or that the attendees thought the message was foolish, then elaborate additional follow-up on the impact of the training is unlikely to be valuable. From a descriptive point of view, the data on immediate outcomes provide the PUSH-EXCEL staff with feedback on what is really going on in the field--data that often turn out to be a helpful reality check for administrators who spend most of their time reading about expectations rather than outcomes.

INTERMEDIATE OUTCOMES

Intermediate outcomes embrace some very important, meaningful events: all of the effects that we grouped under the label "involvement," and the effects that we grouped under "formative investment."

Involvement

Parental involvement. Standard indicators of parental involvement will include:

- attendance at school functions for parents;
- attendance at school functions in which child is participating (e.g., performance by the Glee Club);
- response rate to school mailouts;
- knowledge of the child's teachers;
- knowledge of child's most recent grades;
- knowledge of student's disciplinary problems (if applicable);
- knowledge of the school's course offerings and special programs;
- contacts with teachers and other school staff;
- spontaneous efforts to organize other parents, conduct fund-raising activities, provide resources for students, etc.
- behaviors to enforce attendance;
- behaviors to enforce study hours at home; and
- behaviors to define curfews, permitted activities, etc.

Data sources and samples for these indicators are described more fully in section IV. Briefly, we are faced with extremely difficult problems of representativeness for all indicators that require an interview with the parent. The only indicators for which we can be sure of a statistically meaningful sample are those which can be obtained from the archives (e.g., membership in the PTA, observation for indicators such as attendance at school functions), or ad hoc "experiments" (e.g., tracking the response rate of a mailout that occurs during the course of the evaluation).

Community Involvement. The first step in assessing community involvement will be to compile an inventory of the community groups in the affected neighborhoods: what they are, their objectives, their general level of activity.

The second step will be to identify those groups which should logically be partners of PUSH-EXCEL, concentrating on those that PUSH-EXCEL has explicitly identified for future (or existing) collaboration.

Based on our current understanding of the PUSH-EXCEL approach to community resources, the most productive approach to assessing community involvement appears to be a detailed, qualitative investigation of the interactions between PUSH-EXCEL and these groups. When appropriate, we shall monitor quantitative indicators such as membership, attendance at meetings, and fund-raising results. In most cases, however, the character of community activities is likely to be more revealing then their magnitude.

School Involvement. The PUSH-EXCEL literature discusses some specific steps that schools may take. School teachers are

urged to exchange home phone numbers with parents at the beginning of the year, and school principals are urged to make a "state of the school address" at the beginning of the year. But the more important effect that the Rev. Jackson and PUSH-EXCEL seek is a generally increased level of teacher efforts to go the extra step in helping students. Even at this early stage of the evaluation, it is clear that this aspect of PUSH-EXCEL's aspirations is extremely sensitive. Some teachers welcome the support that PUSH-EXCEL promises; others are vocally resentful at the implication that they have not already been doing the extra step.

In view of this, a structured set of indicators (e.g., number of hours spent at the school after the end of the school day) is likely to be unproductive. Some structured items that reflect level of teacher activity can be developed from interview data. But the focus of the data collection will be semistructured interview items on these topics:

- administrative and other support;
- retrospective account of changes in school atmosphere and general environment;
- perceptions of PUSH-EXCEL;
- knowledge of students' parents;
- contacts with students' parents and other community elements;
- knowledge of school and community resources;
- participation in school and community activities; and
- contributions to the formulation and promotion of school standards.

We anticipate that these interviews early in the 1979-80 school year will suggest indicators of school involvement that are observable or can be put in the form of acceptable interview items.

It should be emphasized that the data on involvement will be supplemented by extensive material on the demographic characteristics of the participants and of the community in general, and on the disposing conditions that favorably or unfavorably affect PUSH-EXCEL activities. Further, all investigations of the involvement outcomes will take special note of two general issues:

- changes over time, in number of participants, level of activity, intensity of activity, etc.; and
- the match between the actual participants and the targeted populations.

Both topics are extremely important. PUSH-EXCEL intends to be a building program, with steadily expanding activities. The charge is sometimes made that it is a short-term phenomenon with a rapidly decaying level of interest after the initial enthusiasm. Measures of changes over time are indispensable. Similarly, PUSH-EXCEL faces a pervasive problem of self-selection, whether the target population is parents, communities, organizations, teachers and school staff, or students. That is, the program may attract those persons who are most motivated to achieve in the first place. It is therefore essential to determine the relationship between the actual and intended target groups.

Formative Investment

As discussed in Chapter II, we see the key intermediate effect on the students as being "formative investment."

PUSH-EXCEL activities generate student involvement in the kind of continuing behaviors that are "practice" for the spontaneous, self-perpetuating, future-oriented investments that the program eventually wants to elicit. Indicators of success in producing formative investment will be positive changes in:

- out-of-school behavior (e.g., studying at night, pursuit of new hobbies, visits to museums, non-assigned reading;
- school attendance;
- knowledge and use of school and community resources;
- participation in specific PUSH-EXCEL activities;
- participation in other extracurricular and community activities;
- level of effort (school work); and
- tardies and cuts.

These will be collected both for a sample of individual students (as discussed in section IV) and using observational and archival data when possible.

INDICATORS OF IMPACT ON STUDENTS

The word "impact" is relative. If PUSH-EXCEL can achieve the students' "formative investment" indicators just described, it will have made a major contribution. Nonetheless, we reserve "impacts" to refer to the more ultimate, long-term effects that motivated the program. We group them under two of the program goals--motivation and responsibility--and a third construct, that of investment. We conclude with a discussion of "achievement" as it relates to the other forms of impact.

Motivation and Responsibility

We as evaluators have a strong preference for behavioral measures over attitudinal ones. One of the major purposes of the formative investment and the investment constructs is to provide the behavioral basis for assessing PUSH-EXCEL's progress toward achieving attitudinal changes. We shall, however, also employ a few selected measures of students' internal states relating to motivation and responsibility.

For motivation, the attitudinal component will be assessed by these measures:

- extent to which students perceive that their efforts will produce rewards;
- students' expectancies that they will obtain the jobs they want;
- ability to delay gratification;
- level of aspiration to careers; and
- achievement values (motives): hope of success and fear of failure.

Standardized instruments will be used whenever possible.

Responsibility will be assessed along positive dimensions:

- helping behaviors at home (e.g., caring for siblings);
- helping behaviors among peers (e.g., peer counseling, tutoring);
- civic helping behavior (e.g., volunteer work);

and in terms of reductions in negative behaviors:

- drug abuse;
- delinquent behavior;
- school attendance;
- pregnancy; and
- violence toward teachers or other students.

We will take behavioral measures of the actual extent to which changes are occurring. The attitudinal component of these dimensions will be assessed quantitatively by simple rating scales, each relevent to a specific dimension.

In addition to quantitative measures, critical incidents will be recorded and extensive semi-structured interviews with open-ended responses will be conducted with students. As in the case of the teacher interviews, we expect that these qualitative accounts will produce the more valuable information about PUSH-EXCEL's effects on the critical but extremely elusive phenomena called motivation and responsibility.

Investment

The indicators that go in the investment index, as opposed to the investment-training index, are based on two characteristics. Investment is voluntary, whereas investment-training derives directly from organized activity or direction. Investment is also predominantly future-oriented with few or no immediate returns. With these criteria in mind, we currently list the following as candidate indicators for the investment index:

- efforts to enhance social skills (e.g., choice of role models);

- efforts to improve personal appearance, health, and hygiene;
- use of personal monetary resources (e.g., allowances, earnings from employment) for long-range goals;
- efforts to get part-time or summer jobs;
- choice of electives (to maximize skills, options);
- efforts to go to college or post-high school training program; and
- efforts to obtain information regarding careers.

These will serve as the basis. To expand the list of indicators, parents and key individuals in the community will be consulted. They will be asked to identify noteworthy behaviors of students, in the context of the norms for youth in the community.

Achievement Indicators

Note that we still have not mentioned test scores or grades, or any other concrete measures of achievement. The delay has been deliberate. It signifies our conclusion that PUSH-EXCEL's success or failure is not appropriately measured by the classic measures of educational achievement (grades and test scores), nor by any other isolated measures of "completed" achievement. This has become increasingly apparent to us over the four months we have observed the program until, by now, we are persuaded that extensive use of grades and test scores may actually detract from the evaluation, unless they are put in a very subordinate context. We offer the following thoughts:

As discussed above, it has been expected from the outset that academic achievement will occur--if at all

toward the end of the causal sequence of events that PUSH-EXCEL tries to put in motion. It is not clear that academic improvement is reasonable to expect during the life of the evaluation. If such expectations are not reasonable, then we are wasting time and resources when we collect the academic achievement data.

A more fundamental objection to measures of academic achievement is that they signify a wrong-headed view of "success" for PUSH-EXCEL. PUSH-EXCEL can accomplish many of its goals, and ones that everyone will accept as important in themselves, without producing changes in traditional measures of academic achievement. We believe that these goals embrace the overwhelming bulk of the events that PUSH-EXCEL wants to bring about. These outcomes may be "intermediate" in the sense that they serve as stepping stones to other outcomes, but they are "ultimate" in the sense of being important even if nothing changes in test scores or grades. If school violence and classroom disruption are decreased, that will be an important improvement in the quality-of-life of the students and the peace of mind of their parents.

The same logic applies even to the changes that are most difficult to measure. If, for example, students in the twelfth grade change their opinion of their own ability to learn as a result of PUSH-EXCEL, it is unlikely that they will have time to show the evidence of that change in the course of high school. But such a change in attitude has to be an important event. As evaluators, we would expect its importance to emerge behaviorally sooner or later--in job-seeking or job advancement, for example. As evaluators, we

are concerned with the difficulties of measuring a meaningful change in attitude in the absence of such behavioral indicators. But these are the evaluator's problems, not the program's. The attitudinal outcome itself would be extremely significant.

These are only examples of the general statement: if PUSH-EXCEL accomplishes even some of its goals short of academic achievement, people familiar with the problems associated with inner-city education and inner-city youth would not wait on changes in academic achievement to make up their minds about whether the program is a good idea.

ATMOSPHERE AND OPPORTUNITY

It remains to discuss the other two program goals of PUSH-EXCEL: enhancement of atmosphere and opportunity.

Atmosphere

Many of the measures of atmosphere will have been picked up by the indicators described above. The primary task will be to combine these into an estimate of changes over time in atmosphere rather than to collect data specifically relating to this goal. However, we shall supplement the indicators with extensive observational data on the appearance of school grounds, incidence of in-school crimes and minor offenses, and interview responses from teachers and students. Interview items will focus on these topics:

- teacher expectations for student performance and behavior in school;
- dissatisfaction and boredom among pupils;

- teachers' sense of personal efficacy;
- perceptions of the physical environment (e.g., overcrowding, obsolescence of facilities and equipment); and
- perceptions of school spirit, traditions, and norms.

Opportunity

PUSH-EXCEL is currently devoting relatively little effort to "opportunity" as we have strictly defined it (i.e., changes in the resource base). But, regardless of PUSH-EXCEL activities, a thorough profile of the community and school resource base will be essential to define the context in which PUSH-EXCEL is operating. Changes over time will be monitored, and links to PUSH-EXCEL will be explored. We shall track community efforts to increase the following resources:

In-school resources:

number of school functions
tutoring services
physical facilities
extracurricular activity
special education programs
size and special training of staff
opportunities for staff development
school staff support for student efforts

Out-of-school resources:

individual and community support for student efforts (e.g., through letters of recommendation for jobs and college; provision of posters for student-sponsored activity)

media coverage of student activities
job markets
general social services
youth services
other training and educational opportunities

Coordinated with the inventory of resources in the community and school, we shall develop a general account of recent political events that might impinge on the progress of the program.

IV. Implementing the Approach: The 1979—80 School Year

During the first year of evaluation, we will concentrate on two tasks. First, we shall select samples of students who will be followed throughout the next two years, and collect from them the baseline information that will be tracked over time as part of an eventual impact analysis. Second, we shall begin to document the first, crucial sequences of the PUSH-EXCEL process--the implementation of activities to involve students, parents, schools, and community groups. In the following section, we review the plans for documenting the extent of implementation, data sources, site and school selection, and sampling strategies. We conclude with discussions of Stakeholder interaction, deliverables, and staffing.

EXTENT OF IMPLEMENTATION

PUSH-EXCEL Structures. To establish and promote PUSH-EXCEL activities, these programmatic structures are required: a city (site) director, and, within each school, a Teacher-Advisory, a Community Liaison, and a school Advisory Council.

The degree to which these structures have been established will be indexed as follows:

- staff coverage
- continuity of staff and Advisory Council
- composition of Advisory Council
- frequency/extent of Advisory Council activity.

PUSH-EXCEL Activities. Measurement of the degree to which PUSH-EXCEL activities have been established is direct: we shall compile detailed rosters of activities in each component, using interviews with key sponsors and observations by the evaluation team as the primary data sources. For each activity, we shall note the following characteristics:

- the sponsor of the activity
- the target population, student, parent or community
- timing and duration of the activity
- stated and implied objectives of the activity
- frequency and duration of contacts with participants and
- history of the activity.

AIR will maintain these data in machine-readable files that will be updated periodically. PUSH-EXCEL may request current or retrospective profiles of activities for their own monitoring purposes.

DATA SOURCES

We shall rely on three primary sources of data: interviews, observation, and school archives.

Interviews with Project Staff, Students, School Staff, Parents, and Key Actors in the Community

These interviews will be a primary source of data for several indicators.

Interviews with project staff will be used to obtain information on PUSH-EXCEL activities and structures. At the start of the school year, at mid-year, and at the close of the year, we shall conduct sessions with the site director, teacher-advisors, and community liaisons using open-ended questions to elicit information on plans and objectives for activities, status of activities, and critical incidents. Periodically, we shall talk to project staff by phone or face-to-face to obtain updates on participation indices.

To obtain data on investment behavior and attitudes, we shall rely on interviews with students and parents conducted during the fall and spring. The students' instruments will contain unstructured and structured items. For certain indicators, scales will be employed.

The Principal and a sample of ten teachers at each component will be interviewed in the spring. The interviews will be structured according to topic, but most items will call for open-ended responses. Topics will include perceptions of the school atmosphere, the role of PUSH-EXCEL, and prognoses for the future of the program.

In the first segment of the evaluation, we shall interview parents and other community participants identified as key actors by project staff. Topics for these unstructured interviews will focus on indications of involvement by these actors.

Observations of PUSH-EXCEL Activities and the School Environment

To obtain data on activities and indicators of the school atmosphere, we shall use structured observation techniques such as critical incident recording and photographs of the school physical plant and students. An observer report instrument will also be used to record specific data points.

Archives

Data compiled by the school system will be the primary source of data for grades, attendance, and other indicators of in-school behavior. We shall use PUSH-EXCEL files and data recorded on an activity profile instrument to supplement the observational and interview data on activities.

Table 1 lists the assessment indicators and the data sources that we shall use to assess each one.

SAMPLING CONSIDERATIONS

Sites

Six cities will be examined starting in the 1979-80 school year. Barring unexpected changes in status, these sites will be Denver, Chattanooga, Chicago, Los Angeles, Kansas City, and Memphis. Additional expansion sites will be visited on an ad hoc basis if funds permit, and contact with these sites will be maintained through monthly telephone interviews with PUSH-EXCEL staff.

TABLE 1
Measurement Chart for Program Outcomes

	Assessment Indicators	Data Sources
ATTENTION	a. Number of participants attending an activity	Observations, PUSH-EXCEL archives
	b. Comprehension of the materials presented	Interviews: Students, PUSH-EXCEL staff
	c. Memory of the material	Interviews: Students
	d. Immediate reaction to the material	Observations Interviews: Students, PUSH-EXCEL staff, school
INTERMEDIATE OUTCOMES		
1. Involvement		
• Parental Involvement	a. Attendance at school functions for parents	Observations Interviews: Parents School archives
	b. Attendance at school functions in which child is participating	Observations Interviews: Parents School archives
	c. Response rate to school mailouts	School archives
	d. Knowledge of child's most recent grades	Interviews: Parents
	e. Knowledge of the child's teachers	Interviews: Parents
	f. Knowledge of student's disciplinary problems	Interviews: Parents
	g. Knowledge of the school's course offerings and special programs	Interviews: Parents
	h. Behaviors to enforce study hours at home	Interviews: Parents
	i. Behaviors to define curfews, permitted activities, etc.	Interviews: Parents

	Assessment Indicators	Data Sources
INTERMEDIATE OUTCOMES (cont'd.)		
1. Involvement (cont'd.)		
• Parental Involvement (cont'd.)	j. Behaviors to enforce attendance	Interviews: Parents, students
	k. Contacts with teachers and other school staff	Interviews: Parents, school staff
	l. Spontaneous efforts to organize other parents, conduct fund-raising activities, provide resources for students, etc.	Interviews: Parents, school staff Newspapers and community newsletters Critical incidents
• Community Involvement	a. Number of interactions between PUSH-EXCEL and community groups	Interviews: PUSH-EXCEL staff, representatives from community groups PUSH-EXCEL files
	b. Membership in community groups	Interviews: Representatives from community groups
	c. Attendance at meetings	Interviews: PUSH-EXCEL staff, representatives from community groups
	d. Fund-raising results	Interviews: PUSH-EXCEL staff, representatives from community groups
	e. Changes over time in number of participants, level of activity, intensity of activity	Interviews: PUSH-EXCEL staff, community actors
	f. For each involvement activity, the match between the actual participants and the targeted population	Interviews: PUSH-EXCEL staff, community actors
	g. Spontaneous efforts (i.e., efforts not specifically suggested or encouraged by PUSH-EXCEL) to address local	Interviews: Newspaper and community newsletters

	Assessment Indicators	Data Sources
INTERMEDIATE OUTCOMES (cont'd.)		
1. Involvement (cont'd.)		
• School Involvement	a. Administrative and other outside means of support	Interviews: Principal, teachers
	b. Retrospective accounts of changes in school atmosphere and general environment	Interviews: Principal, teachers, students
	c. Perceptions of PUSH-EXCEL	Interviews: Principal, teachers
	d. Knowledge of students' parents	Interviews: Teachers, parents
	e. Contacts with students' parents and other community members	Interviews: Teachers, parents, community actors
	f. Knowledge of school and community resources	Interviews: Teachers
	g. Contributions to the formulation and promotion of school standards	Interviews: Principal, teachers
	h. For each involvement activity, changes over time in number of participants, level of activity, intensity of activity	Interviews: Principal, teachers
	i. For each involvement activity, the match between the actual participants and the targeted population	Interviews: Principal, teachers, students
2. Formative Investment	a. School attendance	School archives
	b. Participation in specific PUSH-EXCEL activities	Interviews: Students, PUSH-EXCEL staff, parents
	c. Participation in other extra-curricula activities	Interviews: Students, PUSH-EXCEL staff, parents
	d. Out-of-school behavior (e.g., studying at night)	Interviews: Students, parents Student daily logs
	e. Knowledge and use of school and community resources	Interviews: Students, parents

	Assessment Indicators	Data Sources
INTERMEDIATE OUTCOMES (cont'd.)		
2. Formative Investment (cont'd.)	f. Level of effort (school work)	Interviews: Students, PUSH-EXCEL staff, parents
	g. Tardies and cuts	School archives
IMPACT ON STUDENTS		
1. Motivation	a. Extent to which students perceive that their efforts will product rewards	Interviews: Students Internal-external locus of control scale
	b. Students' expectancies that they will obtain the jobs they want	Interviews: Students
	c. Level of aspiration to careers	Interviews: Students
	d. Ability to delay gratification	Interviews: Students
	e. Achievement values (motives): hope of success and fear of failure	Interviews: Students
2. Responsibility	a. Efforts to assist family and community members (e.g., baby-sitting, participation as volunteer in hospital)	Interviews: Students, parents
	b. Efforts to promote standards of conduct among peers	Interviews: Students, parents Critical incidents, peer nominations
	c. Drug abuse	Interviews: Students, parents School archives
	d. Delinquent behavior	Interviews: Students, parents School archives
	e. School attendance	School archives
	f. Pregnancy	School archives
	g. Violence toward teachers or other students	Interviews: students, parents School archives

	Assessment Indicators	Data Sources
IMPACT ON STUDENTS (cont'd.)		
3. Investment (cont'd.)	a. Efforts to get part-time or summer jobs	Interviews: Students, schools, employment service center counselors
	b. Choice of electives	School archives Student interviews
	c. Efforts to go to college or post-high school training program	Interviews: Students, counselors, PUSH-EXCEL staff
	d. Efforts to obtain information regarding careers	Interviews: Students, counselors, PUSH-EXCEL staff
	e. Efforts to increase social skills	Interviews: Students, parents, PUSH-EXCEL staff
	f. Efforts to create opportunities for other students	Interviews: Students, parents, PUSH-EXCEL staff, peer nominations School newspaper
	g. Efforts to improve personal appearance, health, and hygiene	Interviews: Parents, students
	h. Use of personal monetary resources for long-range goals	Interviews: Parents, students
4. Atmosphere	a. Appearance of school grounds	Observation
	b. Incidents of in-school crimes and minor offenses	School archives
	c. Teacher expectations for student performance and behavior in school	Interviews: Teachers, students
	d. Dissatisfaction and boredom among students	Interviews: Teachers, students
	e. Teachers' sense of personal efficacy	Interviews: Teachers
	f. Perceptions of school spirit, traditions, and norms	Interviews: Teachers, students, principal
	g. Perceptions of the physical environment	Interviews: Teachers, students, principal
	h. Teachers', students' fears of violence in the school	Interviews: Teachers, students
	i. General noise and activity level in the school	Observation

	Assessment Indicators	Data Sources
IMPACT ON STUDENTS (cont'd.)		
5. Opportunity		
• In-School Resources	a. Tutoring services	Interviews: Teachers, counselors, students, School archives
	b. Physical facility	Interviews: Principal Observations
	c. Extracurricular activity	Interviews: Principal, teachers, PUSH-EXCEL staff School archives
	d. Special education programs	Interviews: Principal, teachers, PUSH-EXCEL staff School archives
	e. Size and special training of staff	Interviews: Principal, teachers School archives
	f. Opportunities for staff development	Interviews: Principal, teachers
	g. Number of school functions	School archives: annual reports for the school
	h. School staff support for student efforts	Interviews: Teachers, principal
• Out-of-School Resources	a. Job markets	Bureau of Labor Statistics State and local occupational projections
	b. General social service	Interviews: Community social services staff
	c. Youth services	Interviews: Community social services staff
	d. Other training and educational opportunities	Interviews: Counselor, social worker, PUSH-EXCEL staff, teacher, principal

	Assessment Indicators	Data Sources
IMPACT ON STUDENTS (cont'd.)		
5. Opportunity (cont'd.)		
• Out-of-School Resources (cont'd.)	e. Community members' support of student efforts (e.g., letters of recommendation for jobs and post-high school training, provision of materials for student-sponsored activities)	Interviews: Community actors, students, parents
6. Achievement	a. Grades	School archives
	b. Test scores	School archives

Components

For each city program as a whole, a full description of the program will be obtained. Full-scale data collection at the school level will occur in 12 schools. These will be divided among the cities as appropriate, based on AIR's assessment in early fall 1979 of the planned level of activity at each school in the six cities. Six components shall be what we will call "standard"; six will be "intensive" sites.

Standard schools. EXCEL activities in the school shall be documented in full. This will include observation of all one-time events, examination of archival data, and interviews with participants when the number of participants is small and cannot be expected to appear in sufficient numbers in the random sample. Ad hoc samples of interviews shall also be conducted with parents and teachers (or other adults), for activities that have enlisted their participation. A random sample of 100 students from the 10th grade shall also be drawn, to estimate the degree of coverage of the activities, the actions of participants (when participation has been large-scale), and the relationship of participants and non-participants alike to the EXCEL program. Each component (both standard and intensive) will be characterized by basic sets of school-wide variables (based on observation, teacher interviews, and archives), and student-based variables available from archival data that can be tracked over time. In this sense, all 12 school sites will be "longitudinal."

Intensive schools. The six intensive schools will receive all of the data collection activities of a standard site. In addition, the random sample of 100 students shall be given extensive interviews dealing with family situation, school performance, other relevant behaviors, and narrative responses to topics dealing with the PUSH-EXCEL program. These

students will be interviewed twice each year for two years, along with their parents (when permission to interview can be obtained). The intention is to construct detailed case histories of these 600 students, at a scope and level of qualitative detail that cannot be obtained economically for all 1,200 sample students.

Student Samples

We might suggest several elaborate strategies for selection of the student samples. But we know that none is likely to result in representative groups or classical experimental-control comparisons. Two factors are especially important.

The first is the difficulty of obtaining parental permission for student participation. In an analogous evaluation, for example, we sent permission requests to 120 parents of a randomly selected group of students. The requests were for 30-minute interviews to be held during the school day. Twenty-seven parents granted permission and only 25 of the students could be located for the scheduled interviews. The self-selection factor, which operates on the level of parents and students, is obviously too great to treat the approved group as representative.

The second factor is that student participation in PUSH-EXCEL is a continuum, not a yes/no condition. For example, in a given school, a small group of students may be active voluntarily in one or more PUSH-EXCEL activities, a larger group may attend an annual event (e.g., a Reproductive Health Conference), or any student late for school may be referred to a PUSH-EXCEL tardy program. PUSH-EXCEL activities are open to any student, at any time, and a student who does not become directly involved in an activity may benefit from

changes that occur in the school (e.g., an improved atmosphere) or may be honored by PUSH-EXCEL for excellence in some activity.

To address these issues, we shall implement the following procedure for sampling students:

1. Select random samples of 10th graders from the twelve schools.
2. Sample with replacement until parental permission has been obtained for the desired sample size (100 students per school).
3. Develop operational criteria for participation in PUSH-EXCEL and classify the sample students according to these criteria.
4. Utilize regression approaches to identify differences attributable to level of participation.

This procedure enables us to begin the collection of baseline interview and archival data concurrently with the start of 1979-80 activities. The major drawback is attrition of the sample, and this will probably affect most critically the levels of comparisons we may make among students who vary in participation level.

We shall provide some follow-up of the attrited students, and for participants still in school at the close of the evaluation, we shall have extensive qualitative data from the interviews. However, a detailed roster of participants that we shall compile as part of the implementation assessment will permit us to construct retrospective profiles on selected indicators for students not in the original sample. Data for this group will then be combined with those for the longitudinal sample to form samples adequate for statistical analysis.

STAKEHOLDER INTERACTION

The assessment of Stakeholder information and feedback needs, begun during the Design Phase of the evaluation, will be an ongoing evaluation activity. In addition to periodic, informal communication with Stakeholders, we shall prepare formal briefings on an annual basis. During August 1979, we shall convene Stakeholder panels in the three new HEW-funded sites, using this design document as a basis for discussion. Suggestions arising from these interactions will be included in the design where feasible.

The design permits us to incorporate Stakeholder comments at each increment; therefore, we shall invite Stakeholders' responses to our design plans as they are developed for each sequence.

TASK SCHEDULE AND DELIVERABLES

The schedule for implementation of the evaluation for the 1979-80 school year appears in Figure 1. Also indicated are the required dates for the submission of the following reports:

(1) *Semiannual Report I.* Draft: 30 December 1979. Final: 30 January 1980. This report will focus on the extent of implementation and participation for fall 1979-80. We shall provide detailed presentations of these topics:

- Program structures and activities implemented through 30 November 1979.
- Level of participation in PUSH-EXCEL activities by demographic characteristics.
- Students' basic responses to each activity, by level of participation in the program.

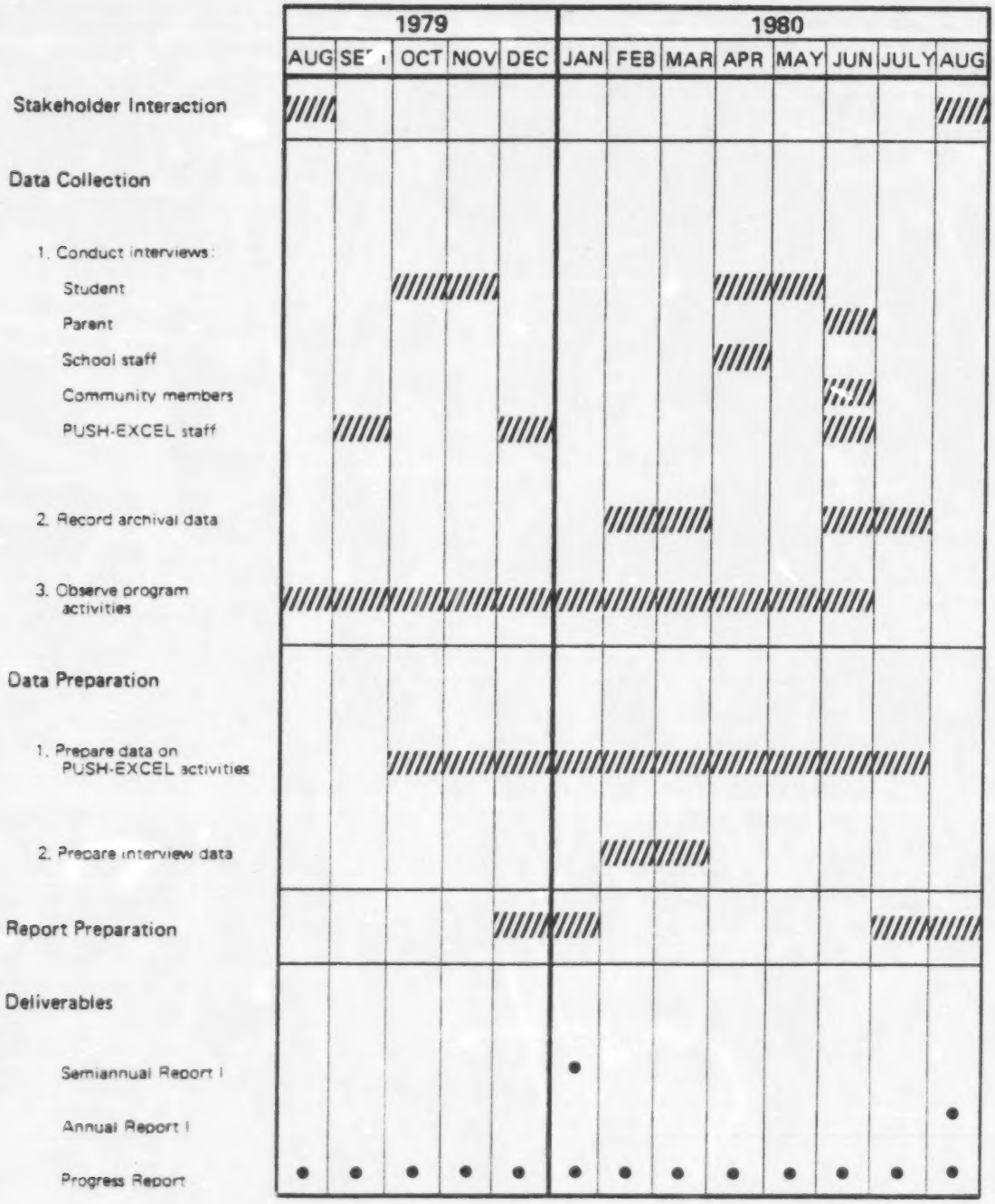


Figure 1. Task Schedule, 1979-80 School Year

The approach to data analysis will be qualitative, although descriptive statistics such as frequency distributions and cross-tabulations will be appropriate for certain measures.

(2) *Annual Report I.* Draft: 31 July 1980. Final: 31 August 1980. This will be a 12-month program report on the topics presented in the first Semiannual Report. The following topics will also be included:

- PUSH-EXCEL activities. An analysis of the effectiveness of PUSH-EXCEL activities in terms of target audiences reached, materials presented, and participants' basic responses to activities. Analyses will be qualitative, drawing on interview data. A classification of PUSH-EXCEL activities according to objectives and content will be presented.

- Implementing the approach--the 1980-81 school year. This will be an overview of PUSH-EXCEL's plans for 1980-81 and the appropriate next steps for the evaluation. Also included will be implementation plans for the evaluation in 1980-81: measurement approach, data collection, data analysis, reporting, and project management.

(3) *Progress Reports.* Monthly to NIE. Quarterly to Stakeholders. On demand to PUSH-EXCEL. Reports to NIE will be in the form of brief (2-3 page) memoranda. We will prepare reports to Stakeholders in the form of newsletters. Progress reports for PUSH-EXCEL will consist of information from the data base on PUSH-EXCEL activities.

(4) *Press Releases.* Periodically, we shall prepare summaries of evaluation activities and results in the form of one-page press releases. These will be sent to schools, Stakeholders, PUSH-EXCEL, and community groups.

STAFFING LEVELS

AIR is assigning three levels of personnel to the evaluation.

Senior staff are individuals at the Research Scientist level and above who are responsible for the design and data analysis, and who will be the principal authors of the reports. In some cases, the role will be one of conducting major Stakeholder meetings, and reviewing and critiquing plans, instrumentation, and draft materials.

Project Associates represent AIR's middle echelon of professional staff. They are at the Senior Research Associate and Associate Research Scientist level, and typically possess some specialized technical skills as well as extensive interviewing and other data collection experience.

We will assign one Washington-based project associate to two sites, one standard and one intensive. These individuals will schedule evaluation activities, maintain contact with PUSH-EXCEL staff, school personnel, and local Stakeholders, and report program developments to the Project Director. Site Coordinators will also supervise the work of on-site research assistants, prepare briefings for the PUSH-EXCEL staff, and participate in data analysis and report writing activities in the Washington office. During periods of extensive data collection, Site Coordinators will be resident at a site.

One project associate will perform the day-to-day activities relating to the design, maintenance, and analysis of the data files.

Research Assistants are the persons responsible for collecting and preparing much of the raw data.

At each intensive site, AIR will recruit and train one part-time research assistant to observe program activities and collect data. These research assistants will maintain essential day-to-day contacts with the program.

On an as-needed basis, Washington-based research assistants will be assigned to interview students and organize and code the data.

Table 2 details the projected division of labor among these three levels of personnel during the 1979-80 school year.

TABLE 2
Estimated Person - Months by Task: 1979–1980 School Year

	PERSON MONTHS		
	SUPERVISORY STAFF[1]	PROJECT ASSOCIATES[2]	RESEARCH ASSISTANTS, FIELD INTERVIEWERS
Stakeholder Interaction	1.0	0	0
Student Interviews	1.0	4.5	15.0
Parent Interviews	.5	1.5	5.0
Interviews with School Staff, Community Members, PUSH-EXCEL Staff	.5	1.0	0
Archival Data Collection	0	.5	8.0
Observation	1.0	2.0	2.5
Data Preparation and Analysis	1.0	1.0	4.0
Preparation of Semiannual Report I	3.0	.5	0
Preparation of Annual Report I	3.0	.5	0

[1] e.g., Murray, C., Murray, S., Rouse
[2] e.g., Allen, Hamm, Kumi, Thompkins